

New Claims

New claims 8-15 have been added by the present Amendment. These claims are believed to be allowable over the prior art of record for at least the following reasons.

Claim 8 is directed to a method for transmitting data between a fail safe computer and a plurality of input/output modules via a bus control unit. The claim includes, among other features, transmitting, via the bus control unit, a first multi-bit message including at least one first check bit and at least one first load bit. At least such a feature (as claimed in claim 8) is not taught or suggested by the prior art of record, as discussed in detail below.

The Kramer '539 Patent

The Kramer '539 Patent is directed to a type of method for transferring data between a computer and a plurality of modules via a bus control unit. It is not explicitly described in the Kramer '539 Patent that the bus control unit addresses the input/output modules. According to column 6, lines 34-41 of the Kramer '539 Patent, a multi-bit message is a special digital message compared by the recipient with respect to identity or predetermined status information. Thus, the transmitted message either includes two mutually identical parts, or it must be a known bit pattern. The Kramer '539 Patent permits only one check to be carried out by two bus units arranged at the bus ends (see Abstract). An expansion to other units that are not arranged at the bus ends is not possible in the Kramer '539 Patent.

Accordingly, Applicants respectfully submit that the Kramer '539 Patent, taken alone or in combination with the Weber '389 Patent, fails to teach or suggest at least

transmitting a multi-bit message including at least one first check bit and at least one first load bit. It is important that the multi-bit message of claim 8 contains both the check bit and at least one useful bit. Thus, as the Kramer '539 Patent includes only check messages, they do not contain other useful information such as at least one first load bit as is required by claim 8 of the present application.

The Weber '389 Patent

With regard to the Weber '389 Patent, the Weber '389 Patent shows forcing a check bit or check bits to become more dynamic, but does not contain any further disclosure. In particular, the Weber '389 Patent does not show that the check bit is transmitted together with any useful bits in a multi-bit message, as required by claim 8 of the present application. Thus, even assuming *arguendo* that the Weber '389 Patent could be combined with the Kramer '539 Patent, which Applicants do not admit, at least such a feature as claimed in independent claim 8 of the present application, is not taught or suggested by the alleged combination of references.

Accordingly, the method in connection with the present application is clearly patentable over the prior art of record, taken either singularly or in combination. The method of the present application can include various advantages, including the fact that it can be used individually for each bus unit, where such an action is necessary. The units further do not have to be arranged at the ends of the bus system. In addition, the check information is always transmitted together with at least one useful bit such as at least one first load bit, so that it can be checked and determined that each individual data transmission is orderly or should be orderly. Accordingly, allowance of each of claims 8-15 in connection with present application is earnestly solicited.